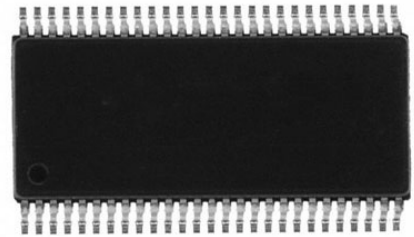


Quad NPN Matched Bipolar Transistor, 30 mA, 40 V, 14-Pin SOIC

Manufacturers	Analog Devices, Inc
Package/Case	14-SOIC (0.154, 3.90mm Width)
Product Type	Transistors
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for MAT14ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MAT14 is a quad monolithic NPN transistor that offers excellent parametric matching for precision amplifier and nonlinear circuit applications. Performance characteristics of the MAT14 include high gain (300 minimum) over a wide range of collector current, low noise (3 nV/√Hz maximum at 100 Hz),

The long-term stability of matching parameters is guaranteed by the protection diodes across the base emitter junction of each transistor. These diodes prevent degradation of beta and matching characteristics due to reverse bias, base emitter current. The superior logarithmic conformance and accurate matching characteristics of the MAT14 make it an excellent choice for use in log and antilog circuits. The MAT14 is an ideal choice in applications where low noise and high gain are required.

Features

- Low Offset Voltage: 400 μV maximum
- High Current Gain: 300 minimum
- Excellent Current Gain Match: 4% maximum
- Low voltage noise density at 100 Hz, 1 mA 3 nV/√Hz maximum
- Excellent Log Conformance: Bulk resistance >
- Guaranteed matching for all transistors

Application

- Low noise op amp front end
- Current mirror and current sink/source
- Low noise instrumentation amplifiers
- Voltage controlled attenuators
- Log amplifiers

Related Products



[MAT01AH](#)

Analog Devices, Inc
CAN6



[MAT04FPZ](#)

Analog Devices, Inc
DIP14



[MAT03EH](#)

Analog Devices, Inc
TO78-6



[MAT01GHZ](#)

Analog Devices, Inc
TO-78



[MAT01GH](#)

Analog Devices, Inc
TO-78



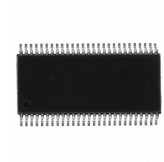
[MAX5078BATT](#)

Analog Devices, Inc
TDFN



[MAX20050ATC/V+T](#)

Analog Devices, Inc
TDFN-C



[MAX2602ESA](#)

Analog Devices, Inc
8-SOIC (0.154, 3.90mm Width)